

DOCUMENT RESUME

ED 446 322

CG 030 451

AUTHOR Worthen, Vaughn E.; Dougher, M. Kirk
TITLE Evaluating Effective Supervision.
PUB DATE 2000-08-00
NOTE 33p.; Paper presented at the Annual Conference of the American Psychological Association (108th, Washington, DC, August 4-8, 2000).
PUB TYPE Information Analyses (070) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Counselor Evaluation; *Counselor Training; Graduate Students; Higher Education; Models; *Practicum Supervision; *Psychotherapy; Supervisory Training

ABSTRACT

This paper outlines the purposes, professional obligations, and key components to consider when providing effective evaluation in psychotherapy supervision. An overview of various methods for gathering supervision data for evaluation purposes is provided including self-reporting; process notes; video and audiotaping; live observation; co-therapy; and practices of reflectivity. A review is provided of research findings related to evaluation in supervision. The paper describes the creation of a Supervision Outcomes by Method Evaluation Matrix to help supervisors identify the kinds of outcomes they are trying to facilitate and the methods they may want to employ to evaluate those outcomes. A list of references to articles on evaluation in supervision and on instruments and formats for evaluation in supervision are provided. (JDM)

Evaluating Effective Supervision

Vaughn E. Worthen, Ph.D.

Brigham Young University

M. Kirk Dougher, Ph.D.

Brigham Young University

Paper presented at the American Psychological Association Convention, Washington, D.C., August 2000.

Correspondence concerning this material should be addressed to Vaughn E. Worthen, Counseling and Career Center, Brigham Young University, 2570 WSC, Provo, UT 84602 or M. Kirk Dougher, Counseling and Career Center, Brigham Young University, 1500 WSC, Provo, UT 84602. Electronic mail may be sent to:

vaughn_worthen@byu.edu

kirk_dougher@byu.edu

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
 This document has been reproduced as
received from the person or organization
originating it.
 Minor changes have been made to
improve reproduction quality.



• Points of view or opinions stated in this
document do not necessarily represent
official OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

V. WORTHEN

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Abstract

This paper outlines the purposes, professional obligation, and important components necessary for consideration in providing effective evaluation in psychotherapy supervision. We give a brief overview of various methods for gathering supervision data for evaluation purposes, including: self-report, process notes, video and audiotaping, live observation, co-therapy, and practices of reflectivity. Next we present a concise review of research findings related to evaluation in supervision. These issues include such items as: the role of the relationship, identifying, developing and communicating evaluative criteria to the supervisees, instrumentation in evaluation, the role of goal setting and feedback, understanding the context of supervisee development in evaluation, the role of evaluation in promoting self-reflective practice, resistance to evaluation in supervision, and biases that can operate in evaluation. We also created an "Supervision Outcomes by Method Evaluation Matrix" to help supervisors identify the kinds of outcomes they are trying to facilitate and the methods they may want to employ to evaluate those outcomes. Finally, we provide a list of references to articles on evaluation in supervision and another list of references to instruments and formats for evaluation in supervision.

Evaluating Effective Supervision

Vaughn E. Worthen, Ph.D. & M. Kirk Dougher, Ph.D.

Introduction

Although it may be described in different terms from various theoretical orientations, most supervisors would likely agree, the goal of supervision is to direct the education of therapists-in-training in order to increase their repertoire of effective skills (Williams, 1988), thus enhancing outcomes with clients. With supervision aiming to increase a trainee's repertoire of techniques and personal abilities, supervisors shoulder the burden of knowing what skills a therapist-in-training requires, how to develop this repertoire and when they have reached the goals developed for supervision.

As Worthington (1987) suggests, supervisors have little training in how to supervise effectively. Moreover, supervisors not only lack training in how to supervise but also have limited availability to methods of recognizing improvements in supervisee skills.

We will attempt to identify relevant findings that are designed to augment discussion and knowledge about the process of supervision evaluation. This review is not designed to be a comprehensive work, rather an overview. It represents some references and ideas that those faced with the daunting task of evaluating supervision, and the improvements therein, might find useful.

Purpose of Supervision Evaluation: To monitor client welfare and improve client outcomes as well as foster the development of new professionals through the enhancement of supervisee skill, self-efficacy, professional identity, sensitivity and ability to work with diverse populations, ethical and legal compliance, etc.

Evaluation can be divided into two main tasks: Goal-setting (the setting of criteria) and Feedback (how well the criteria are being met) (Lehrman-Waterman & Ladany, in press).

Ethical Obligation to Evaluate:

American Psychological Association Ethics Committee. (1992). Ethical principles of psychologists and code of conduct. American Psychologist, 47, 1597-1611.

Association for Counselor Education and Supervision. (1995). Ethical guidelines for counseling supervisors. Counselor Education and Supervision, 34, 270-276.

Evaluation Components (Ellis & Ladany, 1997):

- Mode of therapy (individual, group, couples, family)
- Domain of trainee behaviors (therapy or supervision)
- Competence area (techniques, conceptualization, ethical behavior, specific skills, supervision behaviors, etc.)
- Method of evaluation (self-report, case notes, videotape, live, etc.)
- Proportion of caseload (are you evaluating all clients, a subgroup [multicultural], or a single client)
- Segment of experience (the complete duration of therapy, a specific session, a segment of a session)
- Sequence of training (early in training, middle of treatment course, or end)
- Evaluator (supervisor, supervisee, client, peers, objective rater)
- Level of proficiency (beginner, more advanced)
- Reliability (is the evaluation instrument you are using reliable or if qualitative is it trustworthy, etc.)
- Validity (is it measuring what you believe it should be measuring)

- Format (quantitative/qualitative)

General Methods of Data Gathering for Evaluation:

- Self-Report: (Supervisee verbal reports without other supporting documentation of therapeutic activities.) This is perhaps the most commonly used form of evaluation (Borders, Cashwell, & Rotter, 1995; Romans, Boswell, Carlozzi, & Ferguson, 1995) and one estimate has it occurring 90% of the time (Ladany & Lehrman-Waterman, 1997). Formative evaluation efforts specifically rely heavily on self-report. Self-report is subject to distortion, self-selection, and frequently is not a very rich data source. Holloway (1985) indicated that self-report was particularly inadequate with novice trainees. In one study (Rogers & McDonald, 1995), more direct evaluation methods led supervisors to assess their supervisees as being less prepared than when relying more on self-report.
- Process Notes: (Supervisees written summaries of their work with clients, including session notes). This method can be used as an adjunct to other methods of evaluation. Evaluating process notes allows the supervisor to see if record keeping is appropriate including documenting legal and ethical issues, actions, and obligations. It may also give a supervisor another perspective on the supervisees' conceptual ability including diagnosis, treatment plan, interventions, etc. Many of the same concerns occur with this method as the previous method of self-report.
- Video and audiotaping: Strengths include allowing the supervisor to view or hear direct behavior or verbal responses from the trainee and client, providing a rich source of data. On the other hand this rich data may be overwhelming if observations are not focused and goal directed. Many authors have generated recommendations about using tapes

(Aveline, 1997; Brandell, 1992; Breunlin, Karrer, McGuire, & Cimmarusti, 1988; Cashwell, Looby, & Housely, 1997; Kagan, 1980). Ladany and Lehrman-Waterman (1997) indicate that this medium is used less than 60% of the time. There has been a general concern that the intrusive nature of taping, especially videotaping would lead to performance anxiety in supervisees and decreased performance. Ellis, Beck, & Krengel (1998) found in a study of the effects of increased awareness of self (videotaped sessions) that "...audio-videotaping neither significantly increases counselor trainees' anxiety, nor decreases their performance" (p. 9), thus, they concluded, "A growing body of evidence appears to suggest that the negative effects of audio-videotaping supervisees is transitory or negligible" (p.9).

- Live Observation: This is sometimes accomplished by just being an observer, viewing a session from behind a one-way mirror. At other times live observation can also incorporate the supervisor as an active participant. Some examples of active participation include the "bug-in-the-ear," telephoning into a session, or consultation breaks in a session. A recently developed technique also provides more liberty from rule-governed behavior. This method includes a computer "monitor-in-the-corner" (Follette & Callaghan, 1995). Gould and Bradley (in press) summarize six advantages to live observation: 1) increased likelihood of positive counseling outcomes, 2) supervisees learn more efficiently through this method, 3) clients are more directly protected, 4) supervisees can work with more challenging clients, 5) supervisees tend to risk more, and 6) the supervisory relationship may be enhanced. They also identify some disadvantages including, the time and resources needed to tape sessions and then review tapes, discomfort of clients and supervisees, may effect performance since supervisee may

attempt to impress supervisor or they may be inhibited and not attempt new or creative interventions.

- Co Therapy: An often-overlooked method of gathering information about the skills and progress of therapists-in-training is to engage in co-therapy with your supervisee. This method provides real-time data on the therapeutic interplay between the student-therapist and the client. This method does come with a number of caveats that include time commitment and deferring to the supervisor during the session. However, if these issues are addressed, co-therapy can have tremendous utility through modeling.
- Practice and Reflectivity: This method is comprised of several procedures that can occur during the supervision. First, role-playing. This allows for the supervisor to depict various hypothesized client behaviors. It demands the student to react to the dynamic nature of the therapy session rather than relying on the supervisor to script upcoming sessions. Second, alternative hypothesis generation. In this procedure supervisors suggest alternate data that may become available to the therapist-in-training. Rather, than display the behavior they might consider, as in the role-play, students are encouraged to develop case conceptualization and treatment planning based on newly acquired information. In both role-playing and alternative hypothesis generation student-therapists exhibit behaviors that are central to those being evaluated and developed. And third, engaging in reflective analysis. Here supervisors encourage supervisees to use self-reflective practice to enhance their repertoire development (Neufeldt, 1999; Schon, 1983).

General findings:

- As is true in effective supervision in general the supervision relationship plays a significant role in providing effective evaluation. The supervisory relationship is critical in creating an environment where effective evaluation can occur and be received as a learning experience for supervisees (Talen & Shindler, 1993). Effective goal setting and feedback are associated with stronger supervisory working alliance (Lehrman-Waterman & Ladany, in press). The challenge is not to allow the supervisory relationship to unduly influence the evaluations so that evaluations are either too positive or too negative based on the relationship and not fully informed using competence criteria. Lazar and Mosek (1993) found some evidence that that the working relationship did influence evaluations so that competency evaluations were biased by the relationship. Also Dodenhoff (1981) found that interpersonal attraction between the supervisee and supervisor predicted how positive the evaluation would be. Liked supervisees also receive more effort and support from supervisors and more positive evaluations than disliked supervisees (Turban, Jones, & Rozelle, 1990). Thus, the impact of the supervisory relationship is significant when it comes to evaluation. Care should be taken to foster an effective working relationship, which includes the establishment of clear criteria and methods for supervision evaluation so as to promote objectivity and accuracy in evaluation rather than relying on a global sense of liking or disliking.
- Supervisees are primarily evaluated using qualitative procedures (Norcross & Stevenson, 1984).
- Supervisors may not be adequately performing their evaluative roles (Ladany, Lehrman-Waterman, Molinaro, & Wolgast, 1999).

- Few theorists have addressed how supervisors change as they gain experience. Bernard (1979, 1981, and 1982) described how supervisors could be trained to increase the awareness of options during supervision. She outlined a training method equally applicable to beginning and experienced supervisors. She reported supervisors often become aware of a discrepancy between their intention and performance. The most common discrepancy is supervisors think they are using a counselor role, but in actuality, they engage in a teacher role.
- Alternately, Alonzo (1983) proposed that supervisors continue to change throughout their professional life cycle. She suggested change from novice to mid-career to late-career concerns. At each stage, it was suggested, supervisors wrestle with three issues: self and identity, the relationship between therapist and supervisor and the administrative duties they have. The supervisors within this model are said to resolve these issues differently, because the demands of life and professions differ at each stage of their career.
- Another view is the components of supervision are similar to therapy and having skills as a therapist equates to having the necessary skills to be a supervisor (Rubin, 1989). If this assumption were true, then no further (or only limited) training beyond therapy would be necessary to become a good supervisor. In addition, it would not be necessary to conduct research on a subject the profession implicitly agrees is being handled well. The fact that supervision is being researched implies considerable disagreement with this assumption.
- There are differences in skillfulness in supervision among supervisors (Worthington, 1987). Several investigations into the effectiveness of supervision have found a variety of levels of competence and impact (Cross & Brown, 1983; Heppner & Handley, 1981; Worthington 1984; Zucker & Worthington, 1986). Moreover, their competence level, as

rated by their supervisees, does not seem to improve with experience (Marikis, Russell & Dell, 1985).

- Goals should be clear, specific and measurable (Lehrman & Ladany, in press).
- Criteria and methods for summative evaluation should be explicitly discussed early in supervision (McCarthy, et al., 1995; Lehrman-Waterman & Ladany, in press). Ongoing evaluation will promote greater growth and avoid surprises at the end of the supervisory experiences that could flavor the experience in a negative fashion. Most suggest at least two points of summative evaluation, mid-term and at the end, but others could be included.
- Formative Evaluations occur more regularly and systematically than Summative evaluations.
- There are very few reliable and valid instruments for assessing supervision (Ellis & Ladany, 1997).
- Most evaluation is by the supervisor, often based on very few data points (e.g., such as only one method like video-tapes, process notes, multicultural competencies, etc.).
- Effective evaluation that is conducted from a supportive stance can strengthen the supervisory alliance (Lehrman-Waterman & Ladany, in press; Patton & Kivlighan, 1997) and decrease role conflict and ambiguity in supervisees (Ladany & Friedlander, 1995). One study found that when supervisors liked their supervisees they evaluated them more favorably (Turban, Jones, & Rozelle, 1990).
- Effective goal setting and feedback can lead supervisees to view their supervisors as having contributed to their self-efficacy (Lehrman-Waterman & Ladany, in press).

- Effective goal setting and feedback leads to increased satisfaction with supervision for supervisees (Kadushin, 1992; Lehrman-Waterman & Ladany, in press).
- Evaluation should take into account the experience or developmental level of the supervisee (Stoltenberg, McNeill, & Delworth, 1998), but regardless of experience level of the supervisee goal setting and feedback continue to remain important (Lehrman-Waterman & Ladany, in press).
- Evaluation efforts should ultimately lead to self-reflective practice (Neufeldt, 1999; Schon, 1983).
- Collaborative goal setting and evaluation is desirable (Talen & Schindler, 1993).
- Feedback should be timely (Freeman, 1985; Lehrman-Waterman & Ladany, in press), generally focused on specific behaviors (Borders & Leddick, 1987; Freeman, 1985), based on direct observation (Lehrman-Waterman & Ladany, in press), given in a manner that balances constructive feedback with acknowledging strengths (Halgin & Murphy, 1995; Lehrman-Waterman & Ladany, in press; Stoltenberg, McNeill, & Delworth, 1998; Henderson, Cawyer, & Watkins, 1999), conducted with an appreciation for the sensed vulnerability of supervisees (Henderson, Cawyer, & Watkins, 1999) and include both verbal and written feedback.
- Supervisors may resist evaluation for the following reasons: never been trained adequately in evaluation (Borders & Leddick, 1987), difficulty in switching roles from a nurturing therapist to gatekeeper and supervisor that may need to give constructive feedback that challenges or points out weaknesses, personal avoidance of perceived conflict (Robiner, Fuhrman, & Ristvedt, 1993), and the lack of good methods and instruments for conducting evaluations. Also supervisors are hesitant about evaluating

BEST COPY AVAILABLE

supervisees unless they have been working together for a period of time (Fried, Tiegs, & Bellamy, 1992). Related to this finding, Blodgett, Schmidt, and Scudder (1987) found that supervisors rate the same trainees different according to how long they have known the trainee; generally favoring the positive side for the longer they have known the trainee.

- Supervisors can be affected by various biases. Halo effects, leniency, strictness, or central tendency biases may occur when evaluations are globally positive because supervisors like their supervisees, lenient when there are vague criteria for evaluation, strict when expectations are too high or experience level is not taken into consideration, or when supervisors avoid making distinctions in criteria either because of loosely defined rating measures or desire to avoid being questioned regarding their evaluations (Ellis & Ladany, 1997; Carey, Williams, & Wells, 1988; Robiner, et al., 1993). Also supervisors must be careful not to allow first impressions to overly influence their evaluations, but attempt to stick to evaluating defined criteria. This can be a challenge, since Bernard (1982) found that supervisors might rate the same trainee differently on the same criteria depending upon the importance the supervisor places on the various criteria. One of the influences on deciding what are important criteria for supervisory focus is supervisor theoretical orientation. In relation to this, Goodyear and Robyak (1982) found that theoretical orientation affected the focus in supervision.
- Evaluation procedures and criteria should be discussed early in the supervision relationship as part of informed consent and role induction procedures and can include the developing of a supervision contract (McCarthy, Sugden, Koker, Lamendola, Maurer, & Renninger, 1995). One of the effects of unclear evaluation standards or methods is

that supervisees may not disclose some information because of their concerns over evaluation. In a study of nondisclosures of supervisees, evaluation concerns was listed as one of the top 4 reasons (44% of supervisees) for not disclosing in supervision (Ladany, Hill, Corbett, & Nutt, 1996).

- Training supervisees in self-evaluation skills is important (Borders, et al., 1991; Munson, 1983). Dowling (1984) found that trainees were fairly accurate self-evaluators and also good peer evaluators. Self-evaluation can be accomplished in many ways; such as having trainees periodically examine a tape in some detail for intent, response patterns, use of silence, etc. Self-evaluation is one of the important skills that lead to self-reflective practice (Neufeldt, 1999; Schon, 1987).
- Ratings of poor performance should not be a surprise to the supervisee. Ongoing evaluation is important. Goals, feedback, and summative evaluation materials should be documented.
- Concern about evaluation was one of the main reasons for nondisclosure in a group of interns, who generally reported their supervisory relationship to be good on the whole (Hess, S., Schultz, J., Knox, S., Sloan, L., Brandt, S., Kelley, F., & Hoffman, M. A., 1999).
- “Students viewed the process of evaluation to be central to effective supervision” (Henderson, Sawyer, & Watkins, 1999).

Supervision Outcomes by Method Evaluation Matrix

Evaluation Data Gathering Methods → (source) →		SUMMATIVE EVALUATION (Did supervisee meet acceptable criterion standard)															
		A. Supervisee self-evaluation	B. Reports by supervisors	C. Client input	D. Client Outcome measures	E. Pre-Post measures	F. Formal instrumentation (i.e., SWAI, SSI, RCRI, etc.)	G. Evaluation of written materials (i.e., notes, assessment reports, etc.)	H. Expert/other observations	I. Audio-video taped observations	J. Live supervision	K. Supervisee self-report	L. Process notes	M. Peer feedback through group supervision	N. Self-evaluation/self-feedback	O. Co-therapy	
Supervision Outcomes ↓		↓										↓					
PROFESSIONAL DEVELOPMENT																	
• 1. Confidence (Self-efficacy)																	
• 2. Cognitive Complexity (can tolerate ambiguity, refined clinical judgment)																	
• 3. Professional Identity & Generativity (i.e., commitment to profession, willingness to supervise/mentor, accepts personal responsibility)																	
• 4. Continuous Learning Orientation (i.e., open, flexible, cooperative, accepts feedback)																	
• 5. Ethical and Legal Professional Practice																	
• 6. Others...																	
SKILLS IMPROVEMENT (COMPETENCE)																	
• 7. Establishes an																	

effective therapeutic working alliance																			
• 8. Conceptual and diagnostic skills																			
• 9. Intervention Skills (i.e., following EST protocols, meeting standard of care)																			
• 10. Documentation and record keeping																			
• 11. Termination and referral skills																			
• 12. Crisis intervention skills																			
• 13. Assessment and report writing skills																			
• 14. Group leader skills																			
• 15. Multicultural and diversity awareness and sensitivity																			
• 16. Others...																			
17. POSITIVE CLIENT OUTCOMES																			
18. INCREASED SELF-AWARENESS (aware of impact on others, knowledge of strengths and weaknesses)																			
19. SUPERVISEE SATISFACTION																			
20. INCREASED KNOWLEDGE OF CLINICAL LITERATURE																			
21. OTHERS...																			

References

Evaluating Effective Supervision

Vaughn E. Worthen, Ph.D. & Kirk Dougher, Ph.D., 2000

Alonzo, A. (1983). A developmental theory of psychodynamic supervision. The Clinical Supervisor, 1(3), 23-36.

Aveline, M. (1997). The use of audiotapes in supervision of psychotherapy. In G. Shipton (Ed.), Supervision of psychotherapy and counseling (pp. 80-92). Philadelphia: Open University Press.

Bahrick, A. S., Russell, R. K., & Salmi, S. W. (1991). The effects of role induction on trainees' perceptions of supervision. Journal of Counseling and Development, 69, 434-438.

Basarab, D. J., & Root, D. K. (1992). The training evaluation process: A practical guide to evaluating corporate training programs. Boston: Kluwer.

Bernard, J. (1979). Supervision training: A discrimination Model. Counselor Education and Supervision, 19, 60-68.

Bernard, J. (1981). Inservice training for clinical supervisors. Professional Psychology, 12, 740-748.

Bernard, J. M. (1982, August). Laboratory training for clinical supervisors: An update. Paper presented at the annual meeting of the American Psychological Association, Washington, DC.

Bernard, J. M., & Goodyear, R. K. (1998). Fundamentals of clinical supervision (2nd ed.) Boston: Allyn & Bacon.

Blodgett, E. G., Schmitt, J. F., & Scudder, R. R. (1987). Clinical session evaluation: The effect of similarity with the supervisee. The Clinical Supervisor, 5, 33-43.

Borders, L. D., & Fong, M. L. (1991). Evaluations of supervisees: Brief commentary and research report. Clinical Supervisor, 9(2), 43-51.

Borders, L. D., & Leddick, G. R. (1987). Handbook of counseling supervision. Alexandria, VA: American Association for Counseling and Development.

Borders, L. D., Bernard, J. M., Dye, H. A., Fong, M. L., Henderson, P., & Nance, D. W. (1991). Curriculum guide for training counseling supervisors: Rationale, development, and implementation. Counselor Education and Supervision, 31, 58-82.

Bradley, L. J., & Ladany, N., (Eds.) (in press). Counselor supervision: Principles, process, & practice (3rd Edition). Philadelphia: Accelerated Development.

Breunlin, D., Karrer, B., McGuire, D., & Cimmarusti, R. (1988). Cybernetics of videotape supervision, In H. Liddle, D. Breunlin, & R. Schwartz (Eds.), Handbook of family therapy training and supervision (pp. 194-206). New York: Guilford.

Cain, H. I., & Markowski, E. M. (1989). A private practice supervisory evaluation format. Clinical Supervisor, 7(4), 93-99.

Carey, J. C., Williams, K. S., & Wells, M. (1988). Relationships between dimensions of supervisors' influence and counselor trainees' performance. Counselor Education and Supervision, 28, 130-139.

Costa, L. (1994). Reducing anxiety in live supervision. Counselor Education and Supervision, 34, 30-40.

Cross, D. G., & Brown, D. (1983). Counselor supervision as a function of trainee experience: Analysis of specific behaviors. Counselor Education and Supervision, 22, 333-341.

D'Andrea, M., Daniels, J., & Heck, R. (1991). Evaluating the impact of multicultural counseling training. Journal of Counseling and Development, 70, 143-150.

Dodenhoff, J. T. (1981). Interpersonal attraction and direct-indirect supervisor influence as predictors of counselor trainee effectiveness. Journal of Counseling Psychology, 28, 47-52.

Dougher, M. K., Callaghan, G. M., & Follette, W. C. Supervisor discrepancies in rating effective therapist behaviors: Implications for contemporary training. Submitted to The Behavior Therapist.

Dowling, S. (1984). Clinical evaluation: A comparison of self, self with videotape, peers, and supervisors. Clinical Supervisor, 2(3), 71-78.

Ellis, M. V. (1991). Research in clinical supervision: Revitalizing a scientific agenda. Counselor Education and Supervision, 30, 238-251.

Ellis, M. V., & Ladany, N. (1997). Inferences concerning supervisees and clients in clinical supervision: An integrative review. In C. E. Watkins, Jr. (Ed.), Handbook of psychotherapy supervision (pp. 447-507). New York: Wiley.

Ellis, M. V., Beck, M., & Krengel, M. (1998, August). Effects of self-focused attention on supervisee anxiety and performance. Paper presented at the annual meeting of the American Psychological Association, San Francisco, CA.

Farnill, D., Gordon, J., & Sansom, D. (1997). The role of effective feedback in clinical supervision. Australian Journal of Clinical and Experimental Hypnosis, 25(2), 155-161.

Follette, W. C., & Callaghan, G. M. (1995). Do as I do, not as I say: A behavior analytic approach to supervision. Professional Psychology: Research and Practice, 26, 413-421.

Fordham, A. S., May, B., Boyle, M., Bentall, R. P., & Slade, P. D. (1990). Good and bad clinicians: Supervisors' judgments of trainees' competence. British Journal of Clinical Psychology, 29, 113-114.

Freeman, E. M. (1985). The importance of feedback in clinical supervision. Implications for direct practice. Clinical Supervisor, 3, 5-26.

Fried, Y., Tiegs, R. B., Bellamy, A. R. (1992). Personal and interpersonal predictors of supervisors' avoidance of evaluating subordinates. Journal of Applied Psychology, 77, 462-468.

Galassi, J. P., & Trent, P. A. (1987). A conceptual framework for evaluating supervision effectiveness. Counselor Education and Supervision, 26, 260-269.

Goldberg, D. A. (1985). Process notes, audio, and videotape: Modes of presentation in psychotherapy training. Clinical Supervisor, 3, 3-13.

Goodyear, R. K., & Robyak, J. E. (1982). Supervisors theory and experience in supervisory focus. Psychological Reports, 51, 978.

Gould, L. J., & Bradley, L. J. (in press). Evaluation in Supervision. In L. J. Bradley and N. Ladany (Eds.), Counselor supervision: Principles, process, & practice (3rd Edition). Philadelphia: Accelerated Development.

Hahn, W. K., & Molnar, S. (1991). Intern evaluation in university counseling centers: Process, problems, and recommendations. Counseling Psychologist, 19, 414-430.

Harris, M. B. C. (1994). Supervisory evaluation and feedback. In L. D. Borders (Ed.), Supervision: Exploring the effective components. Greensboro, NC: ERIC/CASS.

Henderson, C. E., Cawyer, C. S., & Watkins, C. E. Jr., (1999). A comparison of student and supervisor perceptions of effective practicum supervision. The Clinical Supervisor, 18, 47-74.

Heppner, P. P., & Roehlke, H. J. (1984). Differences among supervisees at different levels of training: Implications for a developmental model of supervision. Journal of Counseling Psychology, 31, 76-90.

Hess, S., Schultz, J., Knox, S., Sloan, L., Brandt, S., Kelley, F., & Hoffman, M. A. (1999, August). Intern's critical incidents of non-disclosure and reluctant disclosure in counselor supervision: A qualitative analysis. Poster session presented at the annual meeting of the American Psychological Association, Boston, MA.

Holloway, E. L. (1984). Outcome evaluation in supervision research. The Counseling Psychologist, 12, 167-174.

Holloway, E. L., & Neufeldt, S. A. (1995). Supervision: Its contribution to treatment efficacy. Journal of Consulting and Clinical Psychology, 63, 207-213.

Kagan, N. (1980). Influencing human interaction—eighteen years with IPR. In A. K. Hess (Ed.), Psychotherapy supervision: Theory, research and practice (pp. 262-286). New York: Wiley.

Ladany, N. (1997, August). A descriptive model of assessing evaluation approaches for psychotherapy trainees. Paper presented at the annual meeting of the American Psychological Association, Chicago.

Ladany, N., & Lehrman-Waterman, D. (1997, June). Psychotherapy trainee reactions to supervisor self-disclosures. Paper presented at the annual meeting of the Society for Psychotherapy Research, Geilo, Norway.

Ladany, N., Hill, C. E., Corbett, M. M., & Nutt, E. A. (1996). Nature, extent, and importance of what psychotherapy trainees do not disclose to their supervisors. Journal of Counseling Psychology, 43, 10-24.

Ladany, N., Lehrman-Waterman, D. E., Molinaro, M., & Wolgast, B. (1996, August). Supervisor ethical practices as perceived by the supervisees they train. Poster session presented at the annual meeting of the American Psychological Association, Toronto, Canada.

Lambert, M. J., & Ogles, B. M. (1997). The effectiveness of psychotherapy supervision. In C. E. Watkins, Jr. (Ed.), Handbook of psychotherapy supervision (pp. 421-446). New York: Wiley.

Lazar, A., & Mosek, A. (1993). The influence of the field instructor-student relationship on evaluation of students' practice. Clinical Supervisor, 11(1), 111-120.

Lehrman-Waterman, D. E., & Ladany, N. (in press). Development and validation of the Evaluation Process within Supervision Index. Journal of Counseling Psychology.

Levy, L. H. (1983). Evaluation of students in clinical psychology programs: A program evaluation perspective. Professional Psychology: Research and Practice, 14, 497-503.

Marikis, D. A., Russell, R. K., & Dell, D. M. (1985). Effects of supervisor experience level on planning and in-session supervisor verbal behavior. Journal of Counseling Psychology, 32, 410-416.

McCarthy, P., Sugden, S., Koker, M., Lamendola, F., Maurer, S., & Renninger, S. (1995). A practical guide to informed consent in clinical supervision. Counselor Education and Supervision, 35, 130-138.

Munson, C. E. (1993). Clinical social work supervision (2nd ed.). New York: Haworth Press.

Neufeldt, S. A. (1999). Supervision strategies for the first practicum (2nd ed.). Alexandria, VA: American Counseling Association.

Newman, F. L., Kopta, S. M., McGovern, M. P., Howard, K. I., & McNeilly, C. L. (1988). Evaluating trainees relative to their supervisors during the psychology internship. Journal of Consulting and Clinical Psychology, 56, 659-665.

Norcross, J. C., & Stevenson, J. F. (1984). How shall we judge ourselves? Training evaluation in clinical psychology programs. Professional Psychology: Research and Practice, 15, 497-508.

Norcross, J. C., Stevenson, J. F., & Nash, J. M. (1986). Evaluation of internship training: Practices, problems and prospects. Professional Psychology: Research and Practice, 17, 280-282.

Patton, M. J., & Kivlighan, D. M. (1997). Relevance of the supervisory alliance to the counseling alliance and to treatment adherence in counselor training. Journal of Counseling Psychology, 44, 108-115.

Poertner, J. (1986). The use of client feedback to improve practice: Defining the supervisor's role. Clinical Supervisor, 4(4), 57-67.

Robiner, W. N., Fuhrman, M. J., & Ristvedt, S. (1993). Evaluation difficulties in supervising psychology interns. Clinical Psychologist, 46, 3-13.

Robiner, W. N., Saltzman, S. R., Hoberman, H. M., & Schrivar, J. A. (1997). Psychology supervisors' training, experiences, supervisory evaluation and self-rated competence. Clinical Supervisor, 16(1), 117-144.

Rogers, G., & McDonald, P. L. (1995). Expedience over education: Teaching methods used by field instructors. Clinical Supervisor, 13(2), 41-65.

Romans, J. S. C., Boswell, D. L., Carlozzi, A. F., & Ferguson, D. B. (1995). Training and supervision practices in clinical, counseling, and school psychology programs. Professional Psychology: Research and Practice, 26, 407-412.

Rosenbaum, D. N. (1984). Evaluation of student performance in psychotherapy. Journal of Clinical Psychology, 40, 1106-1110.

Rubin, S. S. (1989). At the border of supervision : Critical moments in psychotherapist development. American Journal of Psychotherapy, 43, 387-397.

Schon, D. A. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass.

Shanfield, S. B., Matthew, K. L., & Hetherly, V. (1993). What do excellent psychotherapy supervisors do? American Journal of Psychiatry, 150, 1081-1084.

Shanfield, S. B., Mohl, P. C., Matthews, K. L., & Hetherly, V. (1992). Quantitative assessment of the behavior of psychotherapy supervisors. American Journal of Psychiatry, 149, 352-357.

Stoltenberg, C. D., McNeill, B., & Delworth, U. (1998). IDM supervision: An integrated developmental model for supervising counselors and therapists. San Francisco: Jossey-Bass.

Talen, M. R., & Schindler, N. (1993). Goal-directed supervision plans: A model for trainee supervision and evaluation. Clinical Supervisor, 11(2), 77-88.

Tasman, A. (1993). Setting standards for psychotherapy training: It's time to do our homework. Journal of Psychotherapy Practice and Research, 2(2), 93-96.

Turban, D. B., Jones, A. P., & Rozelle, R. M. (1990). Influences of supervisor liking on a subordinate and the reward context on the treatment and evaluation of that subordinate. Motivation and Emotion, 14, 215-233.

Tyler, J. D., & Weaver, S. H. (1981). Evaluating the clinical supervisee: A survey of practices in graduate training programs. Professional Psychology: Research and Practice, 12, 434-437.

Vonk, M. E., & Thyer, B. A. (1997). Evaluating the quality of supervision: A review of instruments for use in field instruction. Clinical Supervisor, 15, 103-113.

Williams, A. J. (1988). Action methods in supervision. The Clinical Supervisor, 6, 13-27.

Worthington E. L., Jr. (1987). Changes in supervision as counselors and supervisors gain experience: A review. Professional Psychology: Research and Practice, 18, 189-208.

Worthington, E. L., Jr. (1984). An empirical investigation of supervision of counselors as they gain experience. Journal of Counseling Psychology, 31, 63-75.

Zucker, P. J., & Worthington, E. L. (1986). Supervision of interns and postdoctoral applicants for licensure in university counseling centers. Journal of Counseling Psychology, 33, 87-89.

References

Evaluating Effective Supervision Instruments and Formats

Vaughn E. Worthen, Ph.D. & Kirk Dougher, Ph.D., 2000

Bahrick, A. S. (1990). Role induction for counselor trainees: Effects on the supervisory working alliance. Dissertation Abstracts International, 51, 1484B. (University Microfilms No. 90-14, 392) (The Working Alliance Inventory—Trainee version)

Benshoff, J. M., & Thomas, W. P. (1992). A new look at the Counselor Evaluation Rating Scale. Clinical Supervisor, 9(2), 42-51. (Counselor Evaluation Rating Scale)

Berg, K. S., & Stone, G. L. (1980). Effects on conceptual level and supervision structure on counselor skill development. Journal of Counseling Psychology, 27, 500-509. (Training Reaction Questionnaire)

Blocher, D., Christensen, E. W., Hale-Fiske, R., Neren, S. H., Spencer, T., & Fowlkes, S. (1985). Development and preliminary validation of an instrument to measure cognitive growth. Counselor Education and Supervision, 25, 21-30. (Counselor Perception Questionnaire)

Blumberg, A. (1970). A system for analyzing supervision-teacher interaction. In A. Simon & G. Boyer (Eds.), Mirrors for behavior (Vol. 3, pp. 193-286). Philadelphia: Research for Better Schools. (Blumberg's Interaction Analysis)

Efstation, J. F., Patton, M. J., & Kardash, C. M. (1990). Measuring the working alliance in counselor supervision. Journal of Counseling Psychology, 37, 322-329. (Supervisory Working Alliance Inventory; SWAI)

Elliott, R. L., Yudkowsky, R. & Vogel, R. L. (2000). Quality in psychiatric training: Development of a resident satisfaction questionnaire. Academic Psychiatry, 24(1), 41-46.

(Resident Satisfaction Questionnaire)

Friedlander, M. L., & Snyder, J. (1983). Trainees' expectations for the supervisory process: Testing a developmental model. Counselor Education and Supervision, 22, 342-348.

(Self-Efficacy Inventory)

Friedlander, M. L., & Ward, L. G. (1984). Development and validation of the Supervisory Styles Inventory. Journal of Counseling Psychology, 31, 541-557. (Supervisory Styles Inventory; SSI)

Hemlick, L. M. (1998). The role of shame in clinical supervision: Development of the Shame in Supervision Instrument. (Doctoral dissertation, The Pennsylvania State University, 1998). Dissertation Abstracts International, 58, 3924. (Shame in Supervision Instrument)

Heppner, P. P., & Roehlke, H. J. (1984). Differences among supervisees at different levels of training: Implications for a developmental model of supervision. Journal of Counseling Psychology, 31, 76-90. (Supervision Perception Form)

Hill, C. E. (1978). Development of a counselor verbal response category system. Journal of Counseling Psychology, 25, 461-468. (Counselor Verbal Response Category System)

Holloway, E. L., & Wampold, B. E. (1983). Patterns of verbal behavior and judgments of satisfaction in the supervision interview. Journal of Counseling Psychology, 30, 227-234.

(Trainee Personal Reaction Scale--Revised)

Ivey, A. E. (1971). Microcounseling: Innovations in interviewing training. Springfield, IL: Charles C. Thomas. (Ivey's Rating Scale of Counselor Effectiveness)

Johnson, L. D. (1994). Session rating scale. Salt Lake City: Author. (Session rating scale)

Komaki, J. L., Zlotnick, S. & Jensen, M. (1986). Development of an operant-based taxonomy and observational index of supervisory behavior. Journal of Applied Psychology, 71(2), 260-269. (Operant Supervisory Taxonomy and Index)

Ladany, N., & Lehrman-Waterman, D. E. (1999). The content and frequency of supervisor self-disclosures and their relationship to supervisor style and the supervisory working alliance. Counselor Education and Supervision, 38, 143-160. (Supervisor Self-Disclosure Questionnaire; SSDQ; Supervisor Self-Disclosure Index; SSDI)

Ladany, N., & Muse-Burke, J. L. (in press). Understanding and conducting supervision research. In L. J. Bradley and N. Ladany (Eds.), Counselor Supervision: Principles, Process, & Practice (3rd Edition). Philadelphia: Accelerated Development.

Ladany, N., Hill, C. E., Corbett, M. M., & Nutt, E. A. (1996). Nature, extent, and importance of what psychotherapy trainees do not disclose to their supervisors. Journal of Counseling Psychology, 43, 10-24. (Supervision Questionnaire; SQ)

LaFromboise, T. D., Coleman, H. L. K., & Hernandez, A. (1991). Development and factor structure of the Cross-Cultural Counseling Inventory-Revised. Professional Psychology: Research and Practice, 22, 380-388. (Cross-Cultural Counseling Inventory – Revised)

Lambert, M. J., Burlingame, G. M., Umphress, V., Hansen, N. B., Vermeersh, D. A., Clouse, G. C., & Yanchar, S. C. (1996). The reliability and validity of the Outcome Questionnaire. Clinical Psychology and Psychotherapy, 3, 249-258. (Outcome Questionnaire)

Lanning, W. L., Whiston, S., & Carey, J. C. (1994). Factor structure of the Supervisor Emphasis Rating Form. Counselor Education and Supervision, 34, 41-51.

Lanning, W., & Freeman, B. (1994). The Supervisor Emphasis Rating Form-Revised. Counselor Education and Supervision, 33, 294-304.

Larson, L. M., Suzuki, L. A., Gillespie, K. N., Potenza, M. T., Bechtel, M. A., & Toulouse, A. (1992). Development and validation of the Counseling Self-Estimate Inventory. Journal of Counseling Psychology, 39, 105-120. (Counseling Self-Estimate Inventory)

Lehrman-Waterman, D. (1997). Development and validation of the Evaluation Process within Supervision Index. Unpublished doctoral dissertation, Lehigh University.

Lehrman-Waterman, D., & Ladany, N. (in press). Development and validation of the Evaluation Process within Supervision Index. Journal of Counseling Psychology. (Evaluation Process with Supervision Index: EPSI; Supervisee Satisfaction Questionnaire)

Linden, J. D., Stone, S. C., & Shertzer, B. (1965). Development and evaluation of an inventory for rating counseling. Personnel and Guidance Journal, 44, 267-276. (Counseling Evaluation Inventory)

Long, J.K., Lawless, J. J. & Dotson, D. R. (1996). Supervisory Styles Index: Examining supervisees' perceptions of supervisory style. Contemporary Family Therapy, 18(4), 589-606 (Supervisory Styles Index)

McNeill, B. W., Stoltenberg, C. D., & Romans, J. S. (1992). The integrated developmental model of supervision: Scale development and validation procedures. Professional Psychology: Research and Practice, 23, 504-508. (Supervisee Levels Questionnaire – Revised; SLQ-R)

Mead, D. E. (1990). Effective supervision: A task-oriented model for the mental health professions. New York: Brunner/Mazel. (Professional History Form)

- Miars, R. D., Tracey, T. J., Ray, P. B., Cornfield, L., O'Farrell, M., & Gelso, C. J. (1983). Variation in supervision process across trainee experience levels. Journal of Counseling Psychology, 30, 403-412. (Level of Supervision Survey)
- Oetting, E. R., & Michaels, L. (1982). OMART: Oetting/Michaels Anchored Ratings for Therapists. Fort Collins, CO: Rocky Mountain Behavioral Science Institute. (Oetting/Michaels Anchored Ratings for Therapists)
- Olk, M., & Friedlander, M. L. (1992). Trainees' experiences of role conflict and role ambiguity in supervisory relationships. Journal of Counseling Psychology, 39, 389-397. (Role Conflict and Role Ambiguity Inventory; RCRAI)
- Pike-Urlacher, R. A. (1996). Towards the development of the Supervisee Developmental Needs Scale. (Doctoral dissertation, Purdue University, 1996). Dissertation Abstracts International, 56, 5220. (Supervisee Developmental Needs Scale)
- Ponterotto, J. G., Rieger, B. P., Barrett, A., Sparks, R., Sanchez, C. M., & Magids, D. (1996). Development and initial validation of the Multicultural Counseling Awareness Scale. In G. R. Sodowsky & J. C. Impara (Eds.), Multicultural assessment in counseling and clinical psychology (pp. 247-282). Lincoln, NE: Buros Institute of Mental Measurements. (Multicultural Counseling Awareness Scale – Form B)
- Reising, G. N., & Daniels, M. H. (1983). A study of Hogan's model of counselor development and supervision. Journal of Counseling Psychology, 30, 235-244. (Counselor Development Questionnaire)

Robiner, W. N., Fuhrman, M. J., Ristvedt, S., & Bobbitt, B. L. (1994). The Minnesota Supervisory Inventory (MSI): Development, psychometric characteristics, and supervisory evaluation issues. Clinical Psychologist, 47, 4-17. (Minnesota Supervisory Inventory)

Schact, A. J., Howe, H. E., & Berman, J. J. (1988). A short form of the Barret-Lennard Inventory for supervisor relationships. Psychological Reports, 63, 699-703.

Shanfield, W. B., Mohl, P. C., Matthews, K., & Hetherly, V. (1989). A reliability assessment of the Psychotherapy Supervisory Inventory. American Journal of Psychiatry, 146, 1447-1450. (Psychotherapy Supervisory Inventory)

Sodowsky, G. R., Taffé, R. C., Gutkin, T. W., & Wise, S. L. (1994). Development of the Multicultural Counseling Inventory: A self-report measure of multicultural competencies. Journal of Counseling Psychology, 41, 137-148. (Multicultural Counseling Inventory)

Stebnicki, M. A., Allen, H. A. & Janikowski, T. P. (1997). Development of an instrument to assess perceived helpfulness of clinical supervisory behaviors. Rehabilitation Education, 11(4), 307-322. (Clinical Supervision Questionnaire)

Stebnicki, M. A., Allen, H. A., & Janikowski, T. P. (1997). Development of an instrument to assess perceived helpfulness of clinical supervisory behaviors. Rehabilitation Education, 11(4), 307-322. (Clinical Supervision Questionnaire)

Stiles, W. B., & Snow, J. S. (1984). Counseling session impact as viewed by novice counselors and their clients. Journal of Counseling Psychology, 31, 3-12. (The Session Evaluation Questionnaire)

Truax, C. B., & Carkhuff, R. R. (1967). Toward effective counseling and psychotherapy. Chicago: Aldine. (Truax Relationship Questionnaire)

Watkins, C. E., Schneider, L. J., Haynes, J., & Nieberding, R. (1995). Measuring psychotherapy supervisor development: An initial effort at scale development and validation. Clinical Supervisor, 13, 77-90.

Worthington, E. L., Jr., & Roehlke, H. J. (1979). Effective supervision as perceived by beginning counselors-in-training. Journal of Counseling Psychology, 26, 64-73. (Supervisor Questionnaire)



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Evaluating Effective Supervision	
Author(s): Vaughn E. Worthen, Ph.D. & M. Kirk Dougher, Ph.D.	
Corporate Source: Brigham Young University	Publication Date: August 5, 2000

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be
affixed to all Level 1 documents

The sample sticker shown below will be
affixed to all Level 2A documents

The sample sticker shown below will be
affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL IN
MICROFICHE, AND IN ELECTRONIC MEDIA
FOR ERIC COLLECTION SUBSCRIBERS ONLY,
HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

2A

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL IN
MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

2B

Level 1



Level 2A



Level 2B



Check here for Level 1 release, permitting
reproduction and dissemination in microfiche or other
ERIC archival media (e.g., electronic) and paper
copy.

Check here for Level 2A release, permitting
reproduction and dissemination in microfiche and in
electronic media for ERIC archival collection
subscribers only

Check here for Level 2B release, permitting
reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign
here,→
please

Signature: <i>Vaughn E. Worthen</i>	Printed Name/Position/Title: Vaughn E. Worthen, Assoc. Clinical Prof.
Organization/Address: Brigham Young University Counseling and Career Center 2570 WSC Provo, UT 84602	Telephone: (801) 378-6865 FAX: (801) 378-8184 E-Mail Address: <i>vaughn.worthen@byu.edu</i> Date: 11/30/2000

(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

University of North Carolina at Greensboro
ERIC/CASS
201 Ferguson Building
PO Box 26171
Greensboro, NC 27402-6171

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200

Toll Free: 800-799-3742

FAX: 301-552-4700

e-mail: ericfac@inet.ed.gov

WWW: http://ericfac.piccard.csc.com